

Air taxis could reduce fuel consumption, alleviate traffic congestion

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An ORNL model using air taxis on the heavily traveled route between downtown Los Angeles and Los Angeles International Airport revealed that fuel consumption is significantly reduced if even a small percentage of commuters switched to air taxis. Credit: Andy Sproles/ORNL, U.S. Dept. of Energy

If air taxis become a viable mode of transportation, Oak Ridge National Laboratory researchers have estimated they could reduce fuel

consumption significantly while alleviating traffic congestion.

Air taxis, small aerial vehicles that provide point-to-point, on-demand travel, have proven to save time, but their impact on fuel use remains largely unquantified.

An ORNL study focused on the energy used by [air taxis](#) between downtown Los Angeles and Los Angeles International Airport, a route in which congestion is severe during peak hours.

"Our modeling, which can be applied to any congested route, showed that diverting 3-20% of traffic on this route could reduce the traffic and vehicle fuel use from 15-74%," ORNL's Zhenhong Lin said. "The key insight is that if only a small share of travelers in congested areas switched to air taxis, you would create a win-win-win outcome for commuters, the economy and the environment."

More information: Zhenhong Lin et al. Modeling the External Effects of Air Taxis in Reducing the Energy Consumption of Road Traffic, *Transportation Research Record: Journal of the Transportation Research Board* (2020). [DOI: 10.1177/0361198120952791](https://doi.org/10.1177/0361198120952791)

Provided by Oak Ridge National Laboratory

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